

ABSTRACT OF THE DISCLOSURE

There are disclosed a halftone dot producing apparatus in which a phase of halftone dots is freely set up in at least one color plate of the color plates. The halftone dot producing apparatus has an image pixel position deriving section for deriving pixel positions (i, j) associated with values $G(i, j)$ of multi-tone level image data, a threshold pixel position set up section for setting up the pixel position of the associated threshold table to a position in which the pixel position is shifted by the phase $(\Delta i, \Delta j)$, a threshold table selection section for selecting the threshold table, a threshold set up section for setting up a threshold associated with the pixel position of the threshold table in accordance with the selected threshold table, and a comparison section for comparing the threshold set up by the threshold set up section with the value $G(i, j)$ to produce value $D(i, j)$ of halftone dot image data.